## ABSTRACT OF THE DISCLOSURE

The invention relates to a multi-targeting method for locating short-range target objects in terms of distance and angle, said method comprising the following steps: a) a characteristic signal is emitted by a transmitting antenna (11) of a first sensor element (10); b) the reflected characteristic signal is received by at least two adjacent reception antennae (1, 2) of the first sensor element (10); c) the difference in transit time of the reflected characteristic signal to the two adjacent reception antenna (1, 2) of the first sensor element (10) is measured in order to determine the distance between the target objects and the first sensor element (10); and d) the phase differences of the characteristic signal between the two adjacent reception antenna (1, 2) of the first sensor element (10) are measured in order to determine the angles between the target objects and the first sensor element (10). The invention also relates to a device for implementing the above-mentioned method.